2013 Consumer Confidence Report

Water System Name: **Hamilton Branch Mutual Water Co.** Report Date: 2/12/15

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2013 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Wells

Name & general location of source(s): Wells 1 & 2

Location: 3264 Cedar Lane & Hwy A13, Hamilton Branch, CA

Drinking Water Source Assessment information:

Time and place of regularly scheduled board meetings for public participation: Annual Meeting held at 7PM either on the 3rd or 4th Thursday in July

Customers are notified via mail 30 days in advance. Meetings are conducted at the Hamilton Branch Firehall.

For more information, contact: Janice Jolicoeur Phone: (530) 596-4250

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/15/2012	5	0.008 mg/L	0	15		Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/15/2012	5	0.059 mg/L	0	1000[2]		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	9/09/2009	4.0 mg/L	1	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	9/09/2009	52.1 mg/L	2.5	none	none	Sum of polyvalent cations present in the water, generally magnesium

						and calcium, and are usually naturally occurring

**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
See attached				none	none	

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
See attached				none	None	

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
		None			

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language for Community Water Systems: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. **[Hamilton Branch Mutual Water Company]** is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
None				

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	**Total No. of Detections**	**Sample Dates**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
E. coli	(In the year) 0	Every month	0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

VIOLATION OF GROUND WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [a] (Type of approved filtration technology used)	
Turbidity Performance Standards [b] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to _____ NTU in 95% of measurements in a month. 2 – Not exceed _____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

Summary Information for Operating Under a Variance or Exemption

HAMILTON BRANCH MUTUAL WATER CO.

Table 4 - Detection of Contaminants with a Primary Drinking Water Standard

System: 3200150-001	Chemical Name:	Regulatory Category:	Sample Date:	Modifier:	Current Finding:	MCL:	Current Reporting Unit:	MCL Test:	Next Sample Due:
	ALUMINUM	IO-Inorganics (Primary DWS)	9/19/2012	<	0.01	1	mg/L	PASS	2021
	ANTIMONY	IO-Inorganics (Primary DWS)	9/19/2012	<	0.001	0.006	mg/L	PASS	2021
	ARSENIC	IO-Inorganics (Primary DWS)	9/19/2012	<	0.002	0.01	mg/L	PASS	2021
	BARIUM	IO-Inorganics (Primary DWS)	9/19/2012		0.0018	1	mg/L	PASS	2021
	BERYLLIUM	IO-Inorganics (Primary DWS)	9/19/2012	<	0.001	0.004	mg/L	PASS	2021
	CADMIUM	IO-Inorganics (Primary DWS)	9/19/2012	<	0.0002	0.005	mg/L	PASS	2021
	CHROMIUM (TOTAL)	IO-Inorganics (Primary DWS)	9/19/2012		0.002	0.05	mg/L	PASS	2021
	Chromium, Hexavalent	**IO-Inorganics (Primary DWS)**							**DUE**
	FLUORIDE (F) (NATURAL-SOURCE)	IO-Inorganics (Primary DWS)	9/9/2009	<	0.1	2	mg/L	PASS	2018
	MERCURY	IO-Inorganics (Primary DWS)	9/19/2012	<	0.00002	0.002	mg/L	PASS	2021
	NICKEL	IO-Inorganics (Primary DWS)	9/19/2012	<	0.001	0.1	mg/L	PASS	2021
	PERCHLORATE	IO-Inorganics (Primary DWS)	2/17/2010	<	0.002	0.006	mg/L	PASS	2019
	SELENIUM	IO-Inorganics (Primary DWS)	9/19/2012	<	0.002	0.05	mg/L	PASS	2021
	THALLIUM	IO-Inorganics (Primary DWS)	9/19/2012	<	0.0002	0.002	mg/L	PASS	2021
	NITRATE (AS NO3)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013		0.7	45	mg/L	PASS	
	NITRATE + NITRITE (AS N)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013		0.2	10	mg/L	PASS	2016
	NITRITE (AS N)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013	<	0.0001	1	mg/L	PASS	2016
	GROSS ALPHA	RA-Radiological (Primary DWS)	9/25/2013		1.41	15	pCi.L	PASS	2022
	GROSS ALPHA COUNTING ERROR	RA-Radiological (Primary DWS)	9/25/2013		1.18	x	pCi.L		
	Radium 226	**RA-Radiological (Primary DWS)**							**Waived**
	RADIUM 228	RA-Radiological (Primary DWS)	12/26/2007		0.331	1	pCi.L	PASS	2017
	RADIUM 228 COUNTING ERROR	RA-Radiological (Primary DWS)	12/26/2007		0.698	x	pCi.L		
	Uranium (PCI/L)	**RA-Radiological (Primary DWS)**							**Waived**
	1,1,1-TRICHLOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.2	mg/L	PASS	2019
	1,1,2,2-TETRACHLOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.001	mg/L	PASS	2019
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	1.2	mg/L	PASS	2019
	1,1,2-TRICHLOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	1,1-DICHLOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	1,1-DICHLOROETHYLENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.006	mg/L	PASS	2019
	1,2,4-TRICHLOROBENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	1,2-DICHLOROBENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.6	mg/L	PASS	2019

System: 3200150-001	Chemical Name:	Regulatory Category:	Sample Date:	Modifier:	Current Finding:	MCL:	Current Reporting Unit:	MCL Test:	Next Sample Due:
	1,2-DICHLOROETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.0005	mg/L	ACT EX	2019
	1,2-DICHLOROPROPANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	1,3-DICHLOROPROPENE (TOTAL)	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.0005	mg/L	ACT EX	2019
	1,4-DICHLOROBENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	BENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.001	mg/L	PASS	2019
	CARBON TETRACHLORIDE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.0005	mg/L	ACT EX	2019
	CIS-1,2-DICHLOROETHYLENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.006	mg/L	PASS	2019
	DICHLOROMETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	ETHYLBENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.3	mg/L	PASS	2019
	METHYL-TERT-BUTYL-ETHER (MTBE)	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.001	0.013	mg/L	PASS	2019
	MONOCHLOROBENZENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.07	mg/L	PASS	2019
	STYRENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.1	mg/L	PASS	2019
	TETRACHLOROETHYLENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	TOLUENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.15	mg/L	PASS	2019
	TRANS-1,2-DICHLOROETHYLENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.01	mg/L	PASS	2019
	TRICHLOROETHYLENE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.005	mg/L	PASS	2019
	TRICHLOROFLUOROMETHANE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.15	mg/L	PASS	2019
	VINYL CHLORIDE	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	0.0005	mg/L	ACT EX	2019
	XYLENES (TOTAL)	S1-Reg VOC (Primary DWS)	9/25/2013	<	0.0005	1.75	mg/L	PASS	2019
	NITRATE (AS NO3)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013		0.7	45	mg/L	PASS	
	NITRATE + NITRITE (AS N)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013		0.2	10	mg/L	PASS	2016
	NITRITE (AS N)	NI-Nitrate / Nitrite (Primary DWS)	9/25/2013	<	0.0001	1	mg/L	PASS	2016

Table 5 - Detection of Contaminants with a Secondary Drinking Water Standard

System: 3200150-001	Chemical Name:	Regulatory Category:	Sample Date:	Modifier:	Current Finding:	MCL:	Current Reporting Unit:	MCL Test:	Next Sample Due:
	BICARBONATE ALKALINITY	GP-General Physical (Sec DWS)	9/9/2009		70	0	mg/L	No MCL	2018
	CALCIUM	GP-General Physical (Sec DWS)	9/9/2009		11	0	mg/L	No MCL	2018
	CARBONATE ALKALINITY	GP-General Physical (Sec DWS)	9/9/2009	<	10	0	mg/L	No MCL	2018
	CHLORIDE	GP-General Physical (Sec DWS)	9/9/2009	<	1	600	mg/L	PASS	2018
	COLOR	GP-General Physical (Sec DWS)	9/19/2012	<	5	15	Units	PASS	2021
	COPPER	GP-General Physical (Sec DWS)	9/9/2009		0.33	10	mg/L	PASS	2018
	FOAMING AGENTS (MBAS)	GP-General Physical (Sec DWS)	9/25/2013	<	0.1	0.5	mg/L	PASS	2022

HAMILTON BRANCH MUTUAL WATER CO.

System: 3200150-001	Chemical Name:	Regulatory Category:	Sample Date:	Modifier:	Current Finding:	MCL:	Current Reporting Unit:	MCL Test:	Next Sample Due:
	HARDNESS (TOTAL) AS CACO3	GP-General Physical (Sec DWS)	9/9/2009		52.1	0	mg/L	No MCL	2018
	HYDROXIDE ALKALINITY	GP-General Physical (Sec DWS)	9/9/2009	<	10	0	mg/L	No MCL	2018
	IRON	GP-General Physical (Sec DWS)	9/9/2009	<	0.05	0.3	mg/L	PASS	2018
	MAGNESIUM	GP-General Physical (Sec DWS)	9/9/2009		6	0	mg/L	No MCL	2018
	MANGANESE	GP-General Physical (Sec DWS)	9/9/2009	<	0.01	0.05	mg/L	PASS	2018
	ODOR THRESHOLD @ 60 C	GP-General Physical (Sec DWS)	9/19/2012	<	1	3	Units	PASS	2021
	PH, LABORATORY	GP-General Physical (Sec DWS)	9/9/2009		7.5	0	0	No MCL	2018
	SILVER	GP-General Physical (Sec DWS)	9/19/2012	<	0.001	0.1	mg/L	PASS	2021
	SODIUM	GP-General Physical (Sec DWS)	9/9/2009		4	0	mg/L	No MCL	2018
	SPECIFIC CONDUCTANCE	GP-General Physical (Sec DWS)	9/9/2009		119	2200	m ohms	PASS	2018
	SULFATE	GP-General Physical (Sec DWS)	9/9/2009	<	2	600	mg/L	PASS	2018
	TOTAL DISSOLVED SOLIDS	GP-General Physical (Sec DWS)	9/9/2009		70	1500	mg/L	PASS	2018
	TURBIDITY, LABORATORY	GP-General Physical (Sec DWS)	9/19/2012	<	0.2	5	Units	PASS	2021
	ZINC	GP-General Physical (Sec DWS)	9/9/2009		0.1	5	mg/L	PASS	2018